RAJYA SABHA

Thursday, the 16th December, 2004/25 Agrahayana, 1926 (Sake) The House met at eleven of the clock,

MR. CHAIRMAN in the Chair.

ORAL ANSWERS TO QUESTIONS

Drug research in India

*221. SHRI RAMA MUNI REDDY SIRIGIREDDY. Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) what steps his Ministry is taking or propose to take to focus on drug research in India;

(b) the money spent on drug research during the last five years, year-wise;

(c) the money spent on drug research, percentage-wise, out of profit earned by companies during the last five years, year-wise; and

(d) the measures Government are taking to make India a leader in drug development?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPILSIBAL): (a) to (d) A Statement is laid on the Table of the House.

Statement

(a) Ministry of Science and Technology is taking several steps and measures to focus on drug research to make India a leader in drug development. Some of these steps and measures are:

increasing the outlay for Research and Development (R&D) on drug research

introducing newer programmes for drugs and pharmaceuticals R&D'

encouraging collaborative R&D projects among laboratories/ institutions/industry in modern and Indian Systems of Medicine i.e. public-private partnership

establishing state-of-the-art facilities

strengthening the human resource development through research fellowships, young scientist scheme, etc.

establishment of Phamiaceutical Research and Development Support fund(PRDSF)

the Technology Development Boar(i of DST is supporting research and commercialization in the private sector, with, good results, and

organising Pharma Industry-Institutional interactive meet, seminar, symposia on modern, ayurveda, unani, siddha systems of medicine including veterinary drug development.

(b) During the last five years Ministry of Science and Technology has spent Rs.5143 lakhs in 1999-2000, Rs.4187 lakhs in 2000-01, Rs. 4948 lakhs in 2001-02, R8.6340 lakhs in 2002-03 and Rs. 8910 lakhs in 2003-04 respectively on drug research.

(c) No such data is collected.

(d) As provided in part (a) of the question above.

श्री सभापति : सबने बहुत ही मन से आज सत-श्रीअकाल, मणक्कम किया है । मैं समझता हूं कि आज हाउस में शांति रहेगी ।

श्री संजय निरूपम : सर, मंत्री जी भी मन से शांति से, प्यार से जवाब दें आज ।

श्री सभापति : ठीक है ।

SHRIRAMAMUNIREDDY SfRIGIREDDY The average research and development spending on pharma companies in India is less than two per cent of their turnover. The Minister has also referred to the Phamnaceutical Research and Development Support Fund with an initial corpus of Rs.2,297 cnores. I would like to know what action-plan the Ministry has prepared to optimally utilise this Fund on drug research in India.

SHRI KAPIL SIBAL: First of all, Mr. Chairman, Sir, as far as the Pharmaceutical Research and Development Support Fund is concerned, we were hoping that we would get a corpus of Rs.150 crores, but, unfortunately, that was not forthcoming. Originally, we received only Rs.25 crores. We were supposed to spend on our R&D from the interest earned out of Rs.25 crores. Now, of course, we have the corpus of Rs. 150 crores but that is not enough. We need much more money for R&D, especially in the area of developing new drugs. So, we are hoping, and we are, in fact, persuading the Finance Ministry to allocate more funds to us. We have also moved to the Planning Commission for that.

SHRI RAMA MUNI REDDYSIRIGIREDDY: Sir, my next supplementary is based on the reply that the hon. Minister has just now given, a corpus fund of Rs.150 crores, and all that. The recent collaborations by major pharmaceutical companies, particularly the companies which are now having collaboration with the public sector and also with other big private companies, with international giants is a good sign for giving a right direction to drug research in India. In view of this, I would like to know from the hon. Minister what kind of technical, scientific or collaborative assistance is extended by the Government of India to companies in the private sector during the last three years.

SHRI KAPIL SIBAL; Mr Chairman, Sir, as far as we are concerned, we have several avenues of collaboration with private industry. We are devising a new scheme for the purposes of collaboration because we have come to the conclusion that it is impossible for a private company alone to develop drugs, especially in the social development Sector Who is going to develop a drug for T.B.? The big MNCs in the world *am* not going to develop a drug forTB., HIV&AIDSand malaria. For all these, drugs have to be developed by us and by the less developed world. We believe this cannot be done without public-private partnerships. And we are moving in that direction. In fact, we have recently discovered, after 40 years a new molecule for tuberculosis called DUPOTERB, result of an indigenous collaboration, and that also is a public-private partnership. We are asking private companies to come to us. If we find that the project is viable, we give a loan. We, sometimes, give 70 per cent of the amount required. But, of course, that is going to be returned to us as we change a very low rate of interest, i.e. about three per cent. We are fast moving forward in this

direction through public-private partnerships for the purposes of developing new drugs.

DR. KARAN SINGH: Mr. Chairman, Sir, I am somewhat surprised that the ICMR which is supposed to be the basic organisation for research is not even mentioned here. These areas usually used to be under the health Ministry. Could the hon. Minister kindly let me know (a) whether there is a close collaboration with the ICMR, which is not mentioned in the answer? (b) What is the progress in two particular areas? One is the combined drugs against HIV/AIDs, and the second is the population control; the anti-pregnancy vaccines, the male pills. There were a lot of very encouraging leads 30 years ago. They all seem to have petered out. What is the progress on that?

..SHRIKAPIL SIBAL: Mr. Chainnan, Sir, basically, the ICMR is not under my Ministry. But I will be more than happy to answer the question that my friend put to me. One of the things that I have done is, in fact to tell the ICMR that in many of the areas, the R&D that we work on should be done together, because the Department of Biotechnology worKs in some areas and the ICMR works in other areas. I called the Secretaries together and asked them to collaborate their efforts. Now, in the context of the question of HIV and AIDS, thatisexactly what! have done. I asked the Department of Biotechnology to find out the best candidates available so that these two Departments can work together instead of working separately on the same drugs. Let us find out the best candidates available and then invest in *ihem.* As far as anti-pregnancy and the male pill is concerned, again, that is not part of my Ministry. If the hon. Member wants, 1 will find out from the ICMR and give him the appropriate reply.

SHRI MANOJ BHATTACHARYA: Sir, the hon. Minister would certainly appreciate that the pharma companies in this country are mostly private companies, including multi-national companies. I am just putting the question. To my knowledge, they hardly spend anything on research and development. Would the Minister be kind enough to explain the percentage of the total turnover of the pharma market that has been spent on research and development, predominantly by the multinational companies or big Indian companies? What is the percentage? What is their role in the social sector to which you have rightly referred?

SHRI KAPIL SIBAL: Mr. Chairman, Sir, as far as tiie percentage of investment on R&D *qua* net sales turnover is concerned, let me tell you, that foreign entities, that is, multinationals, R&D concerned, the percentage ranges anywhere between 8 per cent and 20 per cent, which is a huge amount. Briefly stated, f^flr. Chairman, Sir, the pharma sector has 25,000 companies. Of the 25,000 companies, 15,000 companies are in the samll-scale sector. Five thousand companies are bulk drug companies. So, you are really left with 5,000 companies which are biggish companies. As far as they are concerned, their expenditure on R&D ranges anywhere between 3 per cent and 5 per cent. Some of our phamna companies, and, in particular, Shanta Biotech, have an R&D expenditure of 27.4 per cent this year. Some of our private pharma companies are doing exceptionally well and investing more and more in R&D. What I am really concerned about, and this is something which I would like to inform the House, is that, if you look at the researchers in R&D per million of population, we don't have enough human resources. 1 will give you some figures which will, perhaps, astound the House. In a country like Britain, it is 1.9 per cent of R and D per million; in Germany, it is 2.5 per cent; in Finland, it is 3.4 per cent; in US, it is 2.8 per cent; in Brazil, it is 1.1 per cent; India comes at the bottom of the list with 0.7 per cent. In this country, the problem really is that we have not got enough human resources, manpower, and unless we put more and more money into education and in education science, we are not going to bring that figure up and our R and D output is going to be minimal. So, we need more investment in human resources.

SHRI RAVI SHANKAR PRASAD. Sir, in the Minister reply we also see a mention about collaborative R and D projects in modern and Indian System of Medicines. I am sure, you would be aware of the recent reports, particularly, in the USA, complaining *inter alia* that Indian System of Medicines, have a lot of lethal metal contents, mercury, etc. They are also reported in the newspapers today. What worries me is that these reports are directly proportionate, in a way, to the increasing acceptability of Indian System of Medicines like *Ayurveda* in Europe and the US. My questions to you are: (a) Is your Ministry taking any step to dispel this kind of misinformation? (b) Do you also propose to make any international campaign in the light of the scientific viability of the Indian System of Medicines?

SHRI KAPIL SIBAL; Sir, in fact,we are laying great emphasis on the Indian System of Medicines and traditional medicines.As far as these reports are concerned, many of these reports are motivated. My Ministry in collaboration with the Ministry of Health will take effective steps to ensure the desire of such misinformation is not perpetrated.

DR. VIJAYMALLYA; Sir, India has an extremely attractive environment with the necessary human resources to encourage huge investment in basic research and development in the pharmaceutical sector Recently, one of the word's foremost multinational companies actually consciously located their Research and Devevlopment Wing in Singaproe. And, the reason cited was that there were not enough Intellectual Property Protection Rights in India. I would like the Minister to kindly note, being myself the Chairman of theAventis Pharma Limited, a multinational drug company, that there is a reluctance to invest in India because of lack of patent protection.

SHRI KAPIL SIBAL: Mr Chairman, Sir, again, this does not involve my Minsitry. But I will be more than happy to answer this question. First of all, the Third Amendment Bill, the latest amendment, would ensure that our patents are in conformity with international obligations. The Government will be taking a position very soon in that regard, say, by January, 2005. As far as the investment climate is concerned, which my learned friend is talking about, in fact, it is fast changing. Multinationals have been coming to me and evincing extreme interest in investing in India. More and more multinationals are investing in India. Presently some multinationals are collaborating with Indian pharmaceutical companies by transferring their know-how and technology to them for the purpose of manufacture of products for the simple reason that we have great human talent, and we are a low cost economy Nobody else in the world has this combination available. So, India is going to forge ahead in this regard. We are going to be the leaders in the pharmaceutical industry in the years to come, and we are ready to compete with anybody else in the world.

पूर्वोत्तर क्षेत्र में सेलुलर फोन सेवा

*222. **श्री द्वेजेन्द्र नाथ शर्मा** : क्या संचार और सूचना प्रौधोगिकी मंत्री यह बताने की कृपा करेंगे कि :

(क) पूर्वोत्तर क्षेत्र में ऐसे कितने जिले है जहां पर सेलुलर फोन सेवाएं नहीं है ;